


# Construction of the FICA system

MW Meiyang Wang HY Haifeng Ye

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 An abbreviated version of this protocol was published in Science Advances in Dec 2021

A far-red light-inducible CRISPR-Cas12a platform for remote-controlled genome editing and gene activation

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## Detailed protocol

There are three plasmids of FICA system, including FRL-responsive sensor vector pXY137, the light-inducible Cas12a expression vector pDL192, and crRNA targeted endogenous gene locus *DNMT1* pZQ28. The detailed sequence of FICA is attached below.

## Related files

 FICA.zip



**How to cite:** (Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used)

1. Wang, M. and Ye, H. (2022). Construction of the FICA system. Bio-protocol Preprint. [bio-protocol.org/prep1650](https://bio-protocol.org/prep1650).
2. Wang, X., Dong, K., Kong, D., Zhou, Y., Yin, J., Cai, F., Wang, M. and Ye, H. (2021). A far-red light-inducible CRISPR-Cas12a platform for remote-controlled genome editing and gene activation. Science Advances 7(50). DOI: [10.1126/sciadv.abh2358](https://doi.org/10.1126/sciadv.abh2358)

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